

REMARKS

Applicants confirm the election of the claims of Group I, claims 1-3, 5-12, 14-17, 34 and 35, and withdraw their provisional traverse of the restriction requirement. The Examiner is authorized to cancel non-elected claims 18-33 upon the indication of allowable subject matter in this application.

Applicants have amended claim 1 to clarify that the tubular body produced by the claimed method comprises a tubular core, a fiber-reinforced plastic layer and a resin distribution medium formed around the core, so that the core, resin distribution medium and plastic layer are coupled together to form the claimed integrally formed plastic tubular body. The amendments to claim 2 are essentially clerical in nature. With the entry of these amendments, claims 1-3, 5-12, 14-17, 34 and 35 are before the Examiner at this time.

Claims 1-5, 10, 11, 15 and 34 stand rejected under 35 USC 102(b) on Tunis. This rejection is respectfully traversed.

First, applicants note that Tunis was published on December 12, 2000, after the August 2, 2000, international filing date of this application. However, Tunis was filed March 31, 1999, so it is prior art under 35 USC 102(e), not 35 USC 102(b) as indicated by the Examiner.

Second, Tunis does not disclose or suggest a method for making an integrally formed body that has a tubular core, fiber-reinforced plastic layer and resin distribution medium formed around the core, all of which are integrally coupled, as claimed. Tunis requires a solid core, not a tubular core, and discloses removing the combination of the fiber-reinforced plastic layer and the resin distribution medium from the core after they are formed into a tube. The Examiner has himself pointed to the failure of Tunis to disclose the invention as now claimed by observing in paragraph 6 of the Action that Tunis teaches supplying the fiber material in a tubular form into which a solid core may be inserted. The claimed method produces a tubular body in which the core, the plastic layer and the resin distribution medium are integrally coupled, i.e., cannot be separated after fabrication, by a method which involves applying the plastic layer and the resin

distribution medium to the surface of the tubular core, not by inserting the core into a preformed tube of material. Tunis does not anticipate the invention as claimed.

Claims 1 and 4 stand rejected under 35 USC 102(b) on the Japanese '649 publication (paragraph 7 of the Action), while claims 1 and 12 stand rejected under 35 USC 103(a) on Nelson in view of Tunis and JP '649 (paragraph 10, second alternative). These rejections are respectfully traversed on the ground that JP '649 was published September 22, 2000, which is after the February 8, 2000, international filing date of this application, and less than one year prior to the national stage entry date of this application on August 17, 2001. The rejected claims are all supported by the translation of the international application filed by applicants as part of the national stage entry of this application, so their effective filing date in the United States is prior to the effective date of JP '649 as prior art.

Claims 1-4, 10, 11, 14 and 35 stand rejected under 35 USC 103(a) on Sekido in view of Tunis. This rejection is respectfully traversed on the ground that Sekido discloses a method of making two-layer tubular members by wrapping layers of fibers and woven fabric around a mandrel, curing the assembly and removing the mandrel. This is clear from the process description at col. 12, lines 34-60, of Sekido as well as from the passage at col. 21, line 21 – col. 22, line 5, cited by the Examiner. The latter passage talks about producing a tubular preform and an expansive tube, which are cured together; this is not the same as the claimed method, in which no expansive tube is used and the preform is formed directly on the core. There is nothing in Sekido that would have motivated a person of ordinary skill in the art to refer to Tunis for its disclosure of a resin distribution medium, nor is there any reason from either Sekido or Tunis to carry out a method comprising the claimed steps so as to form an article in which the tubular core forms an integral part of the final product. This rejection should be withdrawn.

Claims 1 and 12 stand rejected under 35 USC 103(a) on Nelson in view of Tunis. This rejection is respectfully traversed on the ground that Nelson does not teach a method in which the tubular core is used to produce an integrally formed tubular body comprising the core and the

plastic layer. Adding Tunis to Nelson does not produce the claimed methods even in hindsight, so the rejection should be withdrawn.

Claims 6-9 stand rejected under 35 USC 103(a) on Sekido in view of Tunis and further in view of McClure. Since the Examiner relies on Sekido and Tunis for the same teachings as they were cited as disclosing in the rejection of claims 1-4, 10, 11, 14 and 35, this rejection should be withdrawn because McClure does not overcome the deficiencies of Sekido and Tunis in "teach[ing] the basic claimed process as described above."


Claim 17 stand rejected under 35 USC 103(a) on Tunis in view of Nakamura. Claim 17 depends from claim 15, which depends in turn from claim 1. Tunis was cited for its teaching of "the basic claimed process." This rejection is respectfully traversed because Tunis does not teach the subject matter of claim 1, and Nakamura does not overcome the deficiencies of Tunis in this regard regardless of what Nakamura may disclose with respect to claim 17. This rejection should be withdrawn.

Early action allowing claims 1-12, 14-17, 34 and 35 is solicited.

Attached hereto is a marked-up version of the changes made to the claims by this amendment, captioned "**Version with markings to show changes made**".

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 360842008200.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

1. (Twice Amended) A method of producing a an integrally formed fiber reinforced plastic tubular body, comprising a tubular core, a fiber-reinforced plastic layer and a resin distribution medium formed around and integrally with the tubular core, the method comprising:

arranging a resin distribution medium and a reinforcing fiber substrate at an outer periphery ~~or an inner periphery~~ of a the tubular ~~or solid~~ core;

covering said resin distribution medium and reinforcing fiber substrate with an airtight material;

placing an interior portion within said airtight material under vacuum; and

injecting and distributing resin in a resin distribution medium surface direction until impregnation of the reinforcing fiber substrate is effected to produce a the integrally formed fiber-reinforced plastic tubular body.

2. (Twice Amended) A method of producing a fiber reinforced plastic tubular body according to Claim 1, wherein the ~~resin distribution medium~~ tubular core has grooves formed therein for resin distribution on a surface.